

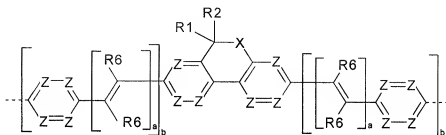
Amendments to the Claims

Please amend Claims 37, 54 and 55. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-36. (Canceled)

37. (Currently Amended) A polymer, characterized in that it comprises at least 1mol% of units of the formula (I),



FORMULA (I)

where the symbols and indices used have the following meanings:

X is identical or different on each occurrence and is in each case C(R3)(R4) or N(R3);

Z is identical or different on each occurrence and is in each case C(R5) or N;

R1, R2, R3, R4 are identical or different on each occurrence and are in each case fluorine, chlorine, bromine, iodine, CN, N(R6)₂, Si(R6)₃ or B(R6)₂, a straight-chain, branched or cyclic alkyl or alkoxy chain having from 1 to 22 carbon atoms in which one or more nonadjacent carbon atoms may also be replaced by NR6, O, S, O-CO-O, CONR6, Si(R6)₂, where one or more H atoms may also be replaced by fluorine, an aryl, heteroaryl or aryloxy group having from 5 to 40 carbon atoms in which one or more carbon atoms may also be replaced by O, S or N and which may also be substituted by one or more nonaromatic radicals R1, with two or more of the radicals R1 to R4 also being able to be joined to form a ring system; with the proviso that two substituents on one carbon atom are not at the same time

an alkoxy or aryloxy side chain and that all substituents R1 to R4 are not at the same time H or not at the same time a methyl group;

R5 is identical or different on each occurrence and is in each case H, F, CN, N(R6)₂ or B(R6)₂, a straight-chain, branched or cyclic alkyl or alkoxy chain having from 1 to 22 carbon atoms in which one or more nonadjacent carbon atoms may also be replaced by O, S, CO-O, O-CO-O, CONR6, Si(R6)₂, where one or more H atoms may also be replaced by fluorine, an aryl, heteroaryl or aryloxy group having from 5 to 40 carbon atoms in which one or more carbon atoms may also be replaced by O, S or N and which may also be substituted by one or more nonaromatic radicals R5; with a plurality of radicals R5 or R5 together with R1 to R4 also being able to form a ring system;

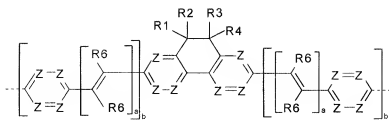
R6 is identical or different on each occurrence and is in each case H, a straight-chain, branched or cyclic alkyl chain having from 1 to 22 carbon atoms in which one or more nonadjacent carbon atoms may also be replaced by O, S, CO-O, O-CO-O, where one or more H atoms may also be replaced by fluorine, an aryl group having from 5 to 40 carbon atoms in which one or more carbon atoms may also be replaced by O, S or N and which may also be substituted by one or more nonaromatic radicals R6;

a is identical or different on each occurrence and is in each case 0 or 1;

b is identical or different on each occurrence and is in each case [[0,]] 1 or 2;

with the proviso that poly(arylene-vinylene) compounds in which one arylene unit is a 9,10-dialkyl-9,10-dihydrophenanthrene are excluded from the invention; and the bond shown as a broken line indicates the linkage in the polymer.

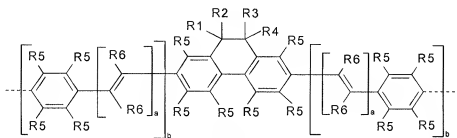
38. (Previously Presented) The polymer as claimed in claim 37, wherein X is C(R3)(R4), as shown in formula (Ia):



FORMULA (Ia)

(Ia).

39. (Previously Presented) The polymer as claimed in claim 38, wherein Z is C(R5), as shown in formula (Ib):



FORMULA (Ib)

(Ib).

40. (Previously Presented) The polymer as claimed in Claim 37, wherein said polymer is conjugated.
41. (Previously Presented) The polymer as claimed in Claim 37, wherein said polymer further comprises additional units which significantly improve the hole injection and/or transport properties.
42. (Previously Presented) The polymer as claimed in claim 41, wherein the units having hole transport properties are selected from among the structural elements triarylamine derivatives, benzidine derivatives, tetraarylene-para-phenylenediamine derivatives, phenothiazine derivatives, phenoxazine derivatives, dihydrophenazine derivatives, thianthrene derivatives, dibenzo-p-dioxin derivatives, phenoxathiine derivatives, carbazole derivatives, azulene derivatives, thiophene derivatives, pyrrole derivatives, furan derivatives and further O-, S- or N containing heterocycles having a high HOMO.

43. (Previously Presented) The polymer as claimed in Claim 37, wherein said polymer further comprises additional units which significantly improve the electron injection and/or transport properties.
44. (Previously Presented) The polymer as claimed in claim 43, wherein the units having electron transport properties are selected from the structural elements pyridine derivatives, pyrimidine derivatives, pyridazine derivatives, pyrazine derivatives, anthracene derivatives, triarylboranes, oxadiazole derivatives, quinoline derivatives, quinoxaline derivatives, phenazine derivatives, arylboranes and further O-, S- or N containing heterocycles having a low LUMO.
45. (Canceled)
46. (Previously Presented) The polymer as claimed in Claim 37, wherein said polymer comprises units which alter the emission characteristics so that electrophosphorescence can be obtained instead of electrofluorescence.
47. (Previously Presented) The polymer as claimed in claim 46, wherein the units which make a transfer from singlet excitons to triplet excitons possible and emit light with high efficiency from the triplet state even at room temperature are selected from among compounds which comprise heavy atoms having an atomic number of more than 36.
48. (Previously Presented) The polymer as claimed in claim 47, wherein the heavy atoms are selected from among the elements of groups 8 to 10 (i.e. Ru, Os, Rh, Ir, Pd, Pt).
49. (Previously Presented) The polymer as claimed in Claim 37, wherein said polymer comprises additional units which aid the transition from the singlet state to the triplet state.
50. (Previously Presented) The polymer as claimed in claim 49, wherein the structural units which aid the transition from the singlet state to the triplet state are selected from the group consisting of carbazoles and bridged carbazole dimers.

51. (Previously Presented) The polymer as claimed in Claim 37, wherein further comprising units which influence the morphology or the emission color of the resulting polymer and are selected from among aromatic structures having from 6 to 40 carbon atoms and stilbene, bisstyrylarylene and tolane derivatives, which may each be substituted by one or more nonaromatic radicals R1.
52. (Previously Presented) The polymer as claimed in claim 51, wherein the structural elements described are selected from among 1,4-phenylene, 1,4-naphthylene, 1,4- or 9,10-anthracenylene, 1,6- or 2,7- or 4,9-pyrenylene, 3,9- or 3,10 perylenylene, 2,7- or 3,6-phenanthrenylene, 4,4'-biphenylene, 4,4" terphenylene, 4,4'-bi-1,1'-naphthylene, 4,5-dihydropyrene, 4,5,9,10 tetrahydropyrene, fluorene, spirobifluorene, 5,7-dihydrodibenzooxepin, cis- or trans-indenofluorene, 4,4'-stilbene, 4,4" bisstyrylarylene and 4,4'-tolane derivatives.
53. (Previously Presented) The polymer as claimed in Claim 37, wherein an average of at least 2 nonaromatic carbon atoms are present in the substituents per repeating unit.
54. (Currently Amended) The polymer as claimed in Claim 37, wherein the substituents of the repeating units contain less than or equal to 12 carbon atoms in a linear chain.
55. (Currently Amended) The polymer as claimed in Claim 37, wherein the following applies to the symbols in the formula (I):
- X is C(R3)(R4) on each occurrence;
- Z is CH on each occurrence;
- R1, R3 are identical or different on each occurrence and are each a straight-chain or branched alkyl chain having from 1 to 8 carbon atoms or an aryl group having from 5 to 10 carbon atoms, in which one or more carbon atoms may also be replaced by N, S and/or O and which may also be substituted by one or more nonaromatic radicals R5;
- R2, R4 are identical or different on each occurrence and are each a straight-chain or branched alkoxy chain having from 1 to 8 carbon atoms;

- a is 1 on each occurrence if the units of the formula (I) are used as emitters;
- b is 1 on each occurrence if the units of the formula (I) are used as emitters
and is otherwise 0 on each occurrence.

- 56. (Previously Presented) The polymer as claimed in Claim 37, wherein the structural units of the formula (I) are selected from among units of the formulae (LXXIX) to (CVI).
- 57. (Previously Presented) The polymer as claimed in Claim 37, wherein that it comprises at least 40 mol% of units of the formula (I).
- 58. (Previously Presented) A mixture comprising one or more polymers as claimed in Claim 37.
- 59. (Previously Presented) A solution comprising one or more polymers as claimed in Claim 37 in one or more solvents.
- 60-68. (Canceled)
- 69. (Previously Presented) An organic electronic device, comprising a polymer as claimed in Claim 37.
- 70. (Previously Presented) An electroluminescence material, comprising a polymer as claimed in Claim 37.
- 71. (Previously Presented) An organic electronic device comprising one or more active layers, wherein at least one of these active layers comprises one or more polymers as claimed in Claim 37.
- 72. (Previously Presented) The organic electronic device as claimed in claim 71, wherein it is a polymeric light-emitting diode (PLED), an organic integrated circuit (O-IC), an organic

field effect transistor (OFET), an organic thin film transistor (OTFT), an organic solar cell (O-SC), an organic photoreceptor or an organic laser diode (O-laser).